SPECIFICATION REFERENCE

DESIGN FACTORS FOR A DESIGN SPEED OF 55 MPH (RURAL) USING E= 8% MAX.

DESIGN VELOCITY =55		WIDTH= 18 FT			WIDTH=20 FT			WIDTH=22 FT			WIDTH=24 FT			WIDTH=48 FT			WIDTH=72 FT			INTERCHANGE RAMPS WIDTH			
		DESIGN SOFTWARE EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)																					
		1 @ 9'			1 @ 10'			1 @ 11'			1 @ 12'			2 @ 12'			3 @ 12'			16 FT		18 FT	
RADIUS(FT)	E(%)	Lt	Lr	w	Lt	Lr	w	Lt	Lr	w	Lt	Lr	w	Lt	Lr	w	Lt	Lr	w	Lt	Lr	Lt	Lr
9720	NC	0	0	2.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7190	2	45	45	3	43	43	0	47	47	0	52	52	0	77	77	0	103	103	0	60	60	64	64
6821	2.1	45	47	3	43	45	0	47	50	0	52	54	0	77	81	0	103	108	0	60	63	64	67
6485	2.2	45	50	3	43	47	0	47	52	0	52	57	0	77	85	0	103	113	0	60	66	64	70
6179	2.3	45	52	3.1	43	49	0	47	54	0	52	59	0	77	89	0	103	118	0	60	69	64	73
5897	2.4	45	54	3.1	43	52	0	47	57	0	52	62	0	77	92	0	103	123	0	60	72	64	76
5638	2.5	45	57	3.1	43	54	0	47	59	0	52	64	0	77	96	0	103	128	0	60	75	64	79
5399	2.6	46	59	3.2	43	56	0	47	61	0	52	67	0	77	100	0	103	133	0	60	78	64	83
5177	2.7	46	61	3.2	43	58	0	47	64	0	52	69	0	77	104	0	103	138	0	60	80	64	86
4972	2.8	46	64	3.2	43	60	0	47	66	0	52	72	0	77	108	0	103	143	0	60	83	64	89
4779	2.9	46	66	3.3	43	62	0	47	68	0	52	75	0	77	112	0	103	149	0	60	86	64	92
4600	3	46	68	3.3	43	64	0	47	71	0	52	77	0	77	115	0	103	154	0	60	89	64	95
4432	3.1	46	71	3.3	43	66	0	47	73	0	52	80	0	77	119	0	103	159	0	60	92	64	98
4274	3.2	46	73	3.3	43	69	0	47	75	0	52	82	0	77	123	0	103	164	0	60	95	64	102
4125	3.3	46	76	3.4	43	71	0	47	78	0	52	85	0	77	127	0	103	169	0	60	98	64	105
3986	3.4	46	78	3.4	43	73	0	47	80	0	52	87	0	77	131	0	103	174	0	60	101	64	108
3853	3.5	46	80	3.4	43	75	0	47	82	0	52	90	0	77	135	0	103	179	0	60	104	64	111
3728	3.6	46	83	3.5	43	77	0	47	85	0	52	92	0	77	138	0	103	184	0	60	107	64	114
3610	3.7	46	85	3.5	43	79	0	47	87	0	52	95	0	77	142	0	103	189	0	60	110	64	117
3498	3.8	46	87	3.5	43	81	0	47	89	0	52	98	0	77	146	0	103	195	0	60	113	64	120
3391	3.9	46	90	3.6	43	83	0	47	92	0	52	100	0	77	150	0	103	200	0	60	116	64	124
3289	4	46	92	3.6	43	86	0	47	94	0	52	103	0	77	154	0	103	205	0	60	119	64	127
3192	4.1	46	95	3.6	43	88	0	47	96	0	52	105	0	77	158	0	103	210	0	60	122	64	130
3100	4.2	47	97	3.7	43	90	0	47	99	0	52	108	0	77	161	0	103	215	0	60	125	64	133
3011	4.3	47	100	3.7	43	92	0	47	101	0	52	110	0	77	165	0	103	220	0	60	128	64	136
2927	4.4	47	102	3.7	43	94	0	47	103	0	52	113	0	77	169	0	103	225	0	60	131	64	139
2846	4.5	72	161	3.8	49	110	2.8	47	106	0	52	115	0	77	173	0	103	230	0	60	134	64	143
2768	4.6	70	161	3.8	49	112	2.8	47	108	0	52	118	0	77	177	0	103	235	0	60	137	64	146
2693	4.7	69	161	3.8	49	114	2.8	47	110	0	52	120	0	77	180	0	103	240	0	60	140	64	149
2621	4.8	68	161	3.9	49	117	2.9	47	113	0	52	123	0	77	184	0	103	246	0	60	143	64	152
2552	4.9	66	161	3.9	49	120	2.9	47	115	0	52	126	0	77	188	0	103	251	0	60	146	64	155
2486	5	65	161	3.9	49	122	2.9	47	118	0	52	128	0	77	192	0	103	256	0	60	149	64	158
2421	5.1	64	161	4	49	125	3	52	131	2	52	131	0	77	196	0	103	261	0	60	152	64	162
2359	5.2	62	161	4	49	128	3	52	133	2	52	133	0	77	200	0	103	266	0	60	155	64	165
2299	5.3	61	161	4	49	130	3	52	136	2	52	136	0	77	203	0	103	271	0	60	158	64	168
2241	5.4	60	161	4.1	50	133	3.1	52	139	2.1	52	138	0	77	207	0	103	276	0	60	160	64	171
2185	5.5	59	161	4.1	50	136	3.1	52	142	2.1	52	141	0	77	211	0	103	281	0	60	163	64	174
2130	5.6	58	161	4.2	50	139	3.2	52	145	2.2	52	143	0	77	215	0	103	286	0	60	166	64	177
2077	5.7	57	161	4.2	50	141	3.2	52	147	2.2	52	146	0	77	219	0	103	292	0	60	169	64	180
2026	5.8	56	161	4.2	50	144	3.2	52	150	2.2	52	149	0	77	223	0	103	297	0	60	172	64	184
1976	5.9	55	161	4.3	50	147	3.3	52	153	2.3	52	151	0	77	226	0	103	302	0	60	175	64	187
1927	6	54	161	4.3	50	149	3.3	52	156	2.3	52	154	0	77	230	0	103	307	0	60	178	64	190
1880	6.1	53	161	4.3	50	152	3.3	52	158	2.3	52	156	0	77	234	0	103	312	0	60	181	64	193
1833	6.2	52	161	4.4	50	155	3.4	52	161	2.4	52	159	0	77	238	0	103	317	0	60	184	64	196
1788	6.3	52	161	4.4	50	157	3.4	52	164	2.4	52	161	0	77	242	0	103	322	0	60	187	64	199
1743	6.4	51	161	4.5	50	160	3.5	53	167	2.5	52	164	0	77	246	0	103	327	0	60	190	64	203
1700	6.5	50	161	4.5	50	163	3.5	53	170	2.5	52	166	0	77	249	0	103	332	0	60	193	64	206
1657	6.6	49	161	4.6	51	166	3.6	53	173	2.6	52	169	0	77	253	0	103	338	0	60	196	64	209
1615	6.7	49	162	4.6	51	169	3.6	53	176	2.6	52	172	0	77	257	0	103	343	0	60	199	64	212
1573	6.8	49	165	4.7	51	172	3.7	53	179	2.7	52	174	0	77	261	0	103	348	0	60	202	64	215
1532	6.9	49	167	4.7	51	174	3.7	53	182	2.7	52	177	0	77	265	0	103	353	0	60	205	64	218
1491	7	49	170	4.8	51	178	3.8	53	185	2.8	52	179	0	77	269	0	103	358	0	60	208	64	222
1450	7.1	49	173	4.8	51	180	3.8	53	188	2.8	52	182	0	77	272	0	103	363	0	60	211	64	225
1409	7.2	49	176	4.9	51	184	3.9	53	191	2.9	52	184	0	77	276	0	103	368	0	60	214	64	228
1369	7.3	50	179	5	52	187	4	54	195	3	56	202	2	90	327	4	120	435	6	60	217	64	231
1327	7.4	50	182	5	52	189	4	54	197	3	56	205	2	90	331	4	120	441	6	60	220	64	234
1285	7.5	50	185	5.1	52	193	4.1	54	201	3.1	56	209	2.1	90	338	4.2	120	450	6.3	60	223	64	237
1241	7.6	50	188	5.2	52	196	4.2	54	204	3.2	56	212	2.2	91	345	4.4	121	460	6.6	60	226	64	240
1195	7.7	50	191	5.3	52	200	4.3	54	208	3.3	56	216	2.3	92	352	4.6	122	469	6.9	60	229	64	244
1145	7.8	50	195	5.4	53	203	4.4	55	211	3.4	57	220	2.4	92	359	4.8	123	478	7.2	60	232	64	247
1085	7.9	51	198	5.5	53	206	4.5	55	215	3.5	57	223	2.5	93	366	5	124	488	7.5	60	235	64	250
964	8	51	203	5.8	53	212	4.8	55	220	3.8	58	229	2.8	95	378	5.6	126	504	8.4	60	238	64	253

NOTE:
Lt, Lr & w VALUES IN FEET. LISTED RADIUS IS THE MINIMUM ALLOWABLE RADIUS FOR THE CORRESPONDING E, Lt, Lr, AND w VALUES.
WIDENING SHOWN IS BASED ON A WB-62 DESIGN VEHICLE.

TC-5.11

TRANSITION CURVES - RURAL
55 MPH DESIGN SPEED

VIRGINIA DEPARTMENT OF TRANSPORTATION

VDOT ROAD AND BRIDGE STANDARDS

REVISION DATE

803.39

SHEET 1 OF 1